

Real-time magnetic field control applications at CERN: an update

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This talk concerns the methods used to control the magnetic field in real-time in CERN synchrotrons, with special focus on the new B-train measurement system being developed for the PS. In the introduction we discuss the purpose of this class of systems and we compare them with possible alternatives, such as mathematical field models and feed-forward control. We then describe recent advances in the CERN PS system, including electronic hardware components and the results of some diagnostic test campaigns with new field sensors. We finally outline the upcoming activities for CERN machines and for collaborations with medical accelerators.